

# 551.506 (261.1) WEATHER OF NORTH AMERICA AND ADJACENT OCEANS

## NORTH ATLANTIC OCEAN

By F. A. YOUNG

The following table shows the average sea-level pressure for the month at a number of land stations on the coast and islands of the North Atlantic. The readings are for 8 a. m., 75th meridian time, and the departures are only approximate, as the normals were taken from the Pilot Chart and are based on Greenwich mean noon observations, which correspond to those taken at 7 a. m., 75th meridian time.

Station	Average pressure	Departures
	Inches	Inches
St. Johns, Newfoundland.....	29.87	-0.11
Nantucket.....	29.99	+0.02
Hatteras.....	30.02	+0.01
Key West.....	30.02	+0.01
New Orleans.....	30.03	+0.03
Swan Island.....	29.90	-0.02
Turks Island.....	30.09	+0.08
Bermuda.....	30.18	+0.08
Horta, Azores.....	30.25	-0.02
Lerwick, Shetland Islands.....	29.74	-0.07
Valencia, Ireland.....	29.98	-0.13
London.....	29.98	-0.08

It will be seen that fairly large negative departures occurred at St. Johns and Valencia, while at the remaining stations the pressure did not differ materially from the normal. At Horta the barometric readings ranged from 29.96 inches on the 9th and 11th to 30.50 inches on the 22d.

July is ordinarily the quietest month of the year over the North Atlantic, and the number of days with winds of gale force during the month under discussion did not differ materially from the normal as shown on the Pilot Chart. According to reports received, gales did not occur on more than two days in any 5-degree square or more than one day in any square south of the 40th parallel.

Fog, as in the two preceding months, was unusually prevalent over the ocean as a whole, with the exception of the immediate vicinity of the European coast. It was observed on 21 days on the banks of Newfoundland and on 19 days over the waters adjacent to the New England coast.

On the 1st there was a well-developed disturbance central about 300 miles west of the Irish coast, and vessels in the region between the 45th and 50th parallels and the 10th and 25th meridians reported moderate to strong gales. This low drifted slowly eastward, and from the 2d until the 7th remained in the vicinity of northern Europe. Storm logs:

American S. S. *Chester Valley*, Stettin to Galveston:

Gale began on the 1st, wind SW., 8. Lowest barometer 29.57 inches at 8 a. m., on the 1st, wind SW., 8, in 47° 28' N., 15° 19' W. End on the 1st, wind WNW., 6. Highest force of wind 8; shifts not given.

American S. S. *West Munham*, Rotterdam to New Orleans:

Gale began on the 2d, wind NW. Lowest barometer 29.54 inches at 7 a. m. on the 2d, wind NW., 5, in 49° 29' N., 23° 25' W. End on the 4th, wind WNW. Highest force of wind 8, NW.; shifts not given.

From the 4th to the 6th vessels in the North Sea encountered westerly to southwesterly gales, while moderate winds were reported by the European land stations. Storm log:

American S. S. *Ophis*, Malmo, Sweden, to Savannah:

Gale began on the 4th, wind SW., 8. Lowest barometer 29.34 inches, wind SW., 8, in 57° 36' N., 10° 18' E. End on the 4th, wind S. Highest force of wind 8, SW.; shifts SSW.-S.

On the 7th, St. Johns, Newfoundland, was near the center of a low that afterwards developed into the most severe disturbance of the month, reaching its greatest intensity on the 9th. Charts VIII to XI cover the period from the 8th to 11th, inclusive. From the 11th to 14th this low moved slowly eastward, losing in force, and on the latter date was in European waters, where it apparently remained for several days, although it was impossible to plot its course accurately on account of lack of observations. Storm logs:

Dutch S. S. *Merope*, Amsterdam to Curacao:

Gale began on the 7th, wind SW. Lowest barometer 29.65 inches on July 7, wind WNW., 8, in 41° 08' N., 25° 40' W. End on July 11th, wind W. Highest force of wind 8; shifts SW.-W.-NW.-W.

French S. S. *Britannia*, Marseilles to New York:

Gale began on the 7th, wind SSW. Lowest barometer 29.59 inches at 10 a. m. on the 8th, wind W., 8, in 40° 32' N., 40° W. End on the 9th, wind NW. Highest force of wind 9, WNW.; shifts W.-WNW.

American S. S. *Vittorio Emanuele III*, New York to Glasgow:

Gale began on the 7th, wind SW. Lowest barometer 29.27 inches at 8 a. m. on the 9th, wind WNW., 10, in 44° 58' N., 39° 56' W. End on the 10th, wind NW. Highest force of wind 10, WNW.; shifts NW.-WNW.-NW.

British S. S. *Kenbane Head*, Montreal to Dublin:

Gale began on the 8th, wind N. Lowest barometer 29.45 inches at 2 a. m. on the 9th, wind N., 8, in 54° N., 46° 30' W. End on the 11th, wind NNW. Highest force of wind 8, N.; shifts N.-NNW.

On the 14th and 15th Newfoundland was surrounded by a slight disturbance, and on the latter date moderate southwesterly gales were reported from the region between the 35th and 40th parallels and the 55th and 60th meridians. Storm log:

American S. S. *Standard Arrow*, Calcutta to New York:

Gale began on the 15th, wind SW. Lowest barometer 30.04 inches at 1 p. m. on the 15th, wind SW., 7, in 38° 09' N., 55° 52' W. End on the 16th, wind NW. Highest force of wind 8, SW.; shifts SSW.-NW.

On the 18th a deep depression was central near Father Point, Quebec, although moderate weather prevailed over the ocean, with the exception of the region between the Bermudas and the 40th parallel, where moderate gales were encountered. Storm log:

British S. S. *Verentia*, London to New York:

Gale began on the 17th, wind S. Lowest barometer 29.55 inches on the 18th, wind S., 8, in 40° 55' N., 62° 30' W. End on the 18th, wind W. Highest force of wind 8; shifts S.-SW.-W.-NW.

From the 19th to 28th the weather over the ocean was comparatively featureless. A few vessels in widely-scattered positions reported moderate gales in their Greenwich mean noon observations, but no storm logs were rendered.

From the 23d to 30th the British S. S. *Maraval*, New York to Trinidad, experienced unusually heavy trade winds as shown by following report:

Very strong trade winds, reaching moderate gale force with squalls of terrific force were experienced. Heavy rains, overcast and cloudy weather. Barometer remaining normally steady;

ranged from 30.01 inches on the 23d to 30.19 on the 26th. Position at 8 a. m. on the 23d, 37° 43' N., 72° 11' W. At 8 a. m. on the 29th, 14° 54' N., 62° 26' W.

On the 29th there was a disturbance central near Hatteras that moved northeastward along the coast and on the 31st covered the region between Newfoundland and Nova Scotia; vessels in the southerly quadrants reported moderate to strong gales. Storm logs:

Italian S. S. *Clara*, Portugal to Philadelphia:

Gale began on the 29th, wind S. Lowest barometer 29.51 inches at 5 p. m. on the 29th, wind N., 9, in 37° 10' N., 70° 15' W. End on the 29th, wind NNE. Highest force of wind 9, N.; shifts S.-Calm-N.-NNE.

French S. S. *Rochambeau*, Havre to New York:

Gale began on the 30th, wind NE. Lowest barometer 29.63 inches from 6 to 12 a. m. on the 30th, wind NE., in 40° 59' N., 66° 02' W. End at 2 p. m. on the 30th. Highest force of wind 8; shifts NE.-N.

British S. S. *Aquitania*, Southampton to New York:

Gale began on the 31st, wind SSW. Lowest barometer 29.46 inches at 2.30 a. m. on the 31st, wind SSW., 10, in 41° 03' N., 58° 40' W. End at 6 a. m. on the 31st, wind W. Highest force of wind 10, SSW.; shifts SSW.-WSW.

## 551.506 (265.2) ——— NORTH PACIFIC OCEAN

By WILLIS EDWIN HURD

July, like the preceding month, was a period of few storms on the North Pacific. Along the entire northern sailing routes gales were rare and for the most part inconsequential. No gales were reported from mid-ocean, and the only severe disturbance of the month was a typhoon in the Far East. Only calms and light variable winds—northwesterly along the Mexican coast—seem to have occurred in lower southeastern tropical waters. At Honolulu the prevailing wind was from the east. The maximum wind velocity was at the rate of 29 miles an hour from the east, but on 8 other days the highest velocity equalled or exceeded 25 miles.

Mr. Joseph A. Stevens, observer on board the American S. S. *Java Arrow*, Shanghai to San Francisco, June 28 to July 15, thus commented upon the weather observed:

An unusually peaceful trip, wind not exceeding force 4, and sea not higher than moderate. During the greater part only a gentle westerly swell was experienced. The sky for the most part of the passage was overcast.

Mr. R. L. Frizzell, second officer of the American S. S. *Crosskeys*, eastward bound, noted the following:

The vessel remained nearly continuously in fog from July 1, in 44° 03' N., 168° 30' E., until July 7, in 49° 40' N., 146° 10' W. The fog was at times very heavy and at other times in drifting banks, accompanied by heavy mist.

Fog was frequent along the upper steamship lines, but occurred on the greatest number of days west and southwest of 176° E. over an area extending nearly to the Japanese coast. Fog was observed in Chinese waters on several days, and frequently in American coast waters between 50° and 30° N., diminishing southward to Cape San Lucas.

The eastern North Pacific high pressure area covered a great part of the central latitudes throughout July, and though it fluctuated in position of crest and in intensity, was little disturbed internally by cyclonic influences. Occasional gales, however, blew on its northern and eastern borders, due in the one case to the sporadic presence of the Aleutian cyclone, and in the other to the proximity of the fairly well settled continental depression over the western region of the United States.

The Aleutian LOW, as such, was as a whole rather feebly defined. It was central on a few days near or to the westward of Dutch Harbor; on a few days over southern Alaska or the northern part of the adjoining gulf; and in considerably higher latitudes during the major part of the month.

Reports from Dutch Harbor were interrupted during the early part of July and it is impossible to give the average pressure for the month. The average for 20 days was 29.94 inches, whereas the July normal is 30.02, the highest monthly normal of the year. The highest pressure reported was 30.34, on the 24th and 26th; the lowest, 28.94, on the 18th. At Midway Island pressure was higher than in any previous July of record, being 30.19, or 0.12 inch above the average of 13 years, including the current one. Also, it was above the average on every day at the hour of observation. The highest reading was 30.28, on the 1st, 2d, 17th, and 18th; the lowest, 30.10, on the 26th and 27th. Pressure at Honolulu was also above normal, being deficient on only two days and equal to the normal on one. The average p. m. pressure of the month was 30.06, or 0.05 inch above normal. The highest pressure was 30.15, occurring on the 16th; the lowest, 29.94, on the 25th.

Low pressure covered the China coast and adjacent waters. This condition was similar to that of June, but cyclonic activity was greater in July, and at least one fully developed typhoon raged over the Eastern Sea.

This typhoon seems to have originated northwest of Guam about the 5th. The initial depression moved west, then turned into northwest, gaining energy until the 11th, when it was reported in a typhoon warning received by the Norwegian S. S. *Storviken* as "at noon in 24° N., 126° E., depth 28.19, direction NW." The *Storviken* at and near that time was close to 32° N., 131° E., experiencing the following weather:

Partly cloudy, strong easterly wind forenoon, after southeasterly, force 5, sea rough, south swell.

On the 11th the American steamer *West Iskip*, Hong-kong to San Francisco, ran into the storm. At 2 a. m. (local time), while near 28° N., 125¼° E., "the wind shifted to NE. 5-6, barometer 29.50, rough ENE. sea." Sometime during the day the wind went into north with full hurricane force and pressure rapidly falling to the observed minimum of 28.40. At 8:23 p. m., in 28° 25' N., 125° 40' E., the wind was WSW. 9, and at midnight SW. 10, pressure 28.90, rough cross sea. At 2 a. m. of the 12th the southwest gale increased to force 11, then gradually diminished, with rising barometer.

The American S. S. *India Arrow*, Swatow to San Francisco, rode out the worst of the typhoon during the night of the 13th-14th. At 8:20 p. m. of the 13th, in 26° 15' N., 124° 40' E., she experienced a moderate NNE. gale, pressure 29.67. At 2:45 a. m. of the 14th the wind changed to east and rose to a hurricane, pressure 29.31, in 26° 40' N., 124° 45' E. By 8 a. m. the worst of the storm was over, the wind coming into ESE. and the force diminishing to 8.

On the 26th and 27th a depression lay west of Guam, and on the 30th and 31st extended over the northern Philippines and Taiwan. It concentrated in area and probably in energy on August 1, moved northward east of Taiwan, and for several days was a weather factor in Far Eastern waters, though at this writing little is known of its strength.

Coming into that part of the ocean east of the 180th meridian, the westernmost gales encountered were south-east squalls at and near Dutch Harbor on the 20th during